

### AMENDMENTS TO THE CLAIMS

Please amend the claims without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, as follows.

Please cancel claims 1, 5-7 and 11-16.

1. (Cancelled)
2. (Currently Amended) A targeted recombinant adenovirus vector, comprising: (i) a gene encoding a heterologous protein; (ii) a modified fiber protein comprising a first zipper peptide, wherein said first zipper peptide is capable of forming heteroduplex with a second zipper peptide via formation of coiled coils; and (iii) a gene encoding a fusion protein comprising said second zipper peptide and a targeting ligand, wherein binding of said first zipper peptide to said second zipper peptide connects said targeting ligand to said modified fiber protein, thereby targeting said adenovirus vector to a cell that expresses a cell surface molecule that binds to said targeting ligand ~~The targeted adenovirus vector of claim 1,~~ wherein said zipper peptides are selected from the group consisting of SEQ ID No. 1-4 NOs: 1, 2, 3, and 4.
3. (Currently Amended) A targeted recombinant adenovirus vector, comprising: (i) a gene encoding a heterologous protein; (ii) a modified fiber protein comprising a first zipper peptide, wherein said first zipper peptide is capable of forming heteroduplex with a second zipper peptide via formation of coiled coils; and (iii) a gene encoding a fusion protein comprising said second zipper peptide and a targeting ligand, wherein binding of said first zipper peptide to said second zipper peptide connects said targeting ligand to said modified fiber protein, thereby targeting said adenovirus vector to a cell that expresses a cell surface molecule that binds to said targeting ligand ~~The targeted adenovirus vector of claim 1,~~ wherein said first zipper peptide is inserted at ~~the~~ an HI loop or the carboxy ~~terminal~~ terminus of said fiber protein.
4. (Currently Amended) A targeted recombinant adenovirus vector, comprising: (i) a gene encoding a heterologous protein; (ii) a modified fiber protein comprising a first zipper peptide, wherein said first zipper peptide is capable of forming heteroduplex with a second zipper peptide via formation of coiled coils; and (iii) a gene encoding a fusion protein comprising said second zipper peptide and a targeting ligand, wherein binding of said first zipper peptide to said second zipper peptide connects said targeting ligand to said modified fiber protein, thereby targeting said adenovirus vector to a cell that expresses a cell surface molecule that binds to said targeting ligand ~~The targeted adenovirus vector of claim 1,~~ wherein said fiber protein is a fiber-fibritin chimera, and said first zipper peptide is inserted at the carboxy ~~terminal~~

terminus of said fiber-fibrin chimera.

5-7. (Cancelled)

8. (Currently Amended) A CD40-targeted recombinant adenovirus vector, comprising: (i) a gene encoding a heterologous protein; (ii) a modified fiber protein comprising a first zipper peptide, wherein said first zipper peptide is capable of forming heteroduplex with a second zipper peptide via formation of coiled coils; and (iii) a gene encoding a fusion protein comprising said second zipper peptide and a targeting ligand selected from the group consisting of CD40 ligand and a single chain fragment (scFv) of anti-human CD40 antibody, wherein binding of said first zipper peptide to said second zipper peptide connects said targeting ligand to said modified fiber protein, thereby targeting said adenovirus vector to a CD40<sup>+</sup> cell ~~The targeted adenovirus vector of claim 7, wherein said zipper peptides are selected from the group consisting of SEQ ID No. 1-4 NOs: 1, 2, 3, and 4.~~

9. (Currently Amended) A CD40-targeted recombinant adenovirus vector, comprising: (i) a gene encoding a heterologous protein; (ii) a modified fiber protein comprising a first zipper peptide, wherein said first zipper peptide is capable of forming heteroduplex with a second zipper peptide via formation of coiled coils; and (iii) a gene encoding a fusion protein comprising said second zipper peptide and a targeting ligand selected from the group consisting of CD40 ligand and a single chain fragment (scFv) of anti-human CD40 antibody, wherein binding of said first zipper peptide to said second zipper peptide connects said targeting ligand to said modified fiber protein, thereby targeting said adenovirus vector to a CD40<sup>+</sup> cell ~~The targeted adenovirus vector of claim 7, wherein said first zipper peptide is inserted at the an HI loop or the carboxy terminal terminus of said fiber protein.~~

10. (Currently Amended) A CD40-targeted recombinant adenovirus vector, comprising: (i) a gene encoding a heterologous protein; (ii) a modified fiber protein comprising a first zipper peptide, wherein said first zipper peptide is capable of forming heteroduplex with a second zipper peptide via formation of coiled coils; and (iii) a gene encoding a fusion protein comprising said second zipper peptide and a targeting ligand selected from the group consisting of CD40 ligand and a single chain fragment (scFv) of anti-human CD40 antibody, wherein binding of said first zipper peptide to said second zipper peptide connects said targeting ligand to said modified fiber protein, thereby targeting said adenovirus vector to a CD40<sup>+</sup> cell ~~The targeted adenovirus vector of claim 7, wherein said fiber protein is a fiber-fibrin chimera, and said first zipper peptide is inserted at the carboxy terminal terminus of said fiber-fibrin chimera.~~

11-16. (Cancelled)